Notice for Inviting Expression of Interest (EOI)

"Advanced Metering Infrastructure Service Provider (AMISP) for consumer and system metering in BESCOM jurisdiction on DBFOOT basis on TOTEX Model".

Enquiry No.: BESCOM/2023-24/SE0034 dated:30/08/2023

The General Manager (DAS, SG & TIC),
BESCOM Integrated Control Centre,
Opp. BWSSB Water tank, Sector-2,
24th main, 17th cross, HSR Layout
Bangalore-560 102.

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1. Intent and Objective

Advanced Metering Infrastructure (AMI) is one of the key components in smart grids. An AMI comprises of systems and networks, that collects and analyses data received from smart meters. In addition, AMI also provides intelligent management of various power-related applications and services based on the data collected from smart meters. Thus, AMI plays a significant role in the smooth functioning of smart grids.

Advanced Metering Infrastructure (AMI) is an integrated system of Smart meters, Communication network and Data management systems that enables two-way communication between the utility and the consumer.

This will increase the Billing efficiency and bring down the energy losses with respect to energy consumed recorded to the barest minimum. The AMI system shall help utility to manage their resources and business process efficiently.

The scope of services of the Advanced Metering Infrastructure Service Provider (AMISP) is to implement end-to-end smart system metering in the selected AMI Project area, operating the AMI System for 'Total Meter-months' and thereafter transfer the ownership of the entire AMI system along with its valid licenses, and any data collected during the Project to the BESCOM at the end of the Contract Period.

The functions of AMISP shall include the following:

1. Supply, installation, integration, testing and commissioning of Smart system metering, Communication Infrastructure, Head End System (HES), Meter Data Management system Meter Data Management (MDM), Mobile Application, Network Operation cum Monitoring Centre (NOMC), auxiliary LT components, along with necessary hardware and software
2. AMI System integration to ensure timely data exchange of consumer and system meter information between the Utility solutions and the AMI system for carrying out energy accounting and generation of the various reports, as required.
3. Consumer indexing with DTs and feeder to DT indexing on de-novo basis
4. Generation of automated energy audit reports.
5. Operation, maintenance, and support services after the successful completion of the Operational Go-Live of the system.
6. The overall contract period shall be earlier of
   (a) 10 (ten) years from the date of execution of the Contract or
   (b) As soon as the "Meter-Months" exceeds "Total Meter-months.
7. Training of BESCOM personnel.
8. Other activities to be carried out to ensure successful installation and commissioning.

This is an invitation for expression of interest for the above mentioned scope and not an invitation for bid. It is explicitly restricted to obtaining information such as Lifecycle meter cost, PMA charges, Contract period, implementation period and this should not be construed as a financial proposal, it is purely for discovery of rates and no award will be issued.

2. Bid Data Sheet

Sr. No.	Particulars	Details
1	Enquiry No.	BESCOM/2023-24/SE0034 dated:30/08/2023
2	Website	https://kppp.karnataka.gov.in
3	Name of Work	Expression of interest for Advanced Metering Infrastructure Service Provider (AMISP) for consumer and system metering in BESCOM jurisdiction on DBFOOT basis on TOTEX Model
4	Earnest Money Deposit(EMD)	Rs. 5,000/-
5	Document Downloading Start Date	01/09/2023 from 15:00Hours Onwards
6	Last date for bid submission	16/09/2023 upto 15:00Hours
7	Opening of the bids	19/09/2023 upto 15:15Hours
8	Contact address and phone number	1. General Manager DAS & SG section Mobile: +91-9448279010 Email: gmdas@bescom.co.in or 2. Deputy General Manager SG & TIC section Mobile: +91-8277889653 Email: dgmtic@bescom.co.in
9	EOI Submission Format	Scanned copy of the bid document shall be submitted through KPP portal

3. Minimum Qualification Requirements

3.1 General Minimum Qualification Requirements

Sl. No.	Requirements	Supporting Documents
Technical Requirements		
1	Sole/ Lead Bidder must have either: (a) paid for, or received payments for, construction of Eligible Project(s); or (b) paid for development of Eligible project(s) in any Indian/ Global Utility (power/ water/ natural gas/ telecom) in the last 7 (seven) Financial Years with aggregate project value of not less than INR [50% of the Estimated Project Cost]	a) References along with requisite contract/ Purchase Order (PO)/ Work Order (WO). The references should indicate client name, scope of work, Project start date as per the format prescribed **Annexure-II** In case Non-Disclosure agreement (NDA) is signed with the client, Bidder shall provide an undertaking for the NDA and shall also provide a client certification as proof of experience along with Client Name/ Email Address/ Contact no./ designation etc. b) Documentary evidence of completion of the Project or completion of Go-live status (i.e., Go-live certificate, UAT testing certificate etc.) of the respective project as per the definition of Go-Live/ UAT specified therein or other documentary evidence indicating completion (e.g., proof of payment received/ proof of asset capitalized in books of accounts (as applicable) and client certificate for supply of material or similar proofs) along with contact details of the client; c) Any other documentation for implementation performance/ operation
2	Sole/ Lead Bidder/ any other Consortium Member must have experience of integration of head-end system with MDM on standard interfaces and data exchange models for at least [20,000] consumers / end points (cumulatively) in an Indian/ Global Utility (power/ water/ natural gas/ telecom) in the last 7 (seven) years which are in operation for at least 1 (one) year. Or Sole/ Lead Bidder/ any other Consortium Member should have installed, integrated, tested, and commissioned control center hardware (or on cloud) and application software for at least [50,000] endpoints (cumulatively) in an Indian/ Global Utility (power/ water/ natural gas/ telecom) in last 7 (seven) years which are in operation for at least 1(one) year	
3	The Sole/ Lead Bidder should have a valid pre-qualification and technical empanelment certificate for the required communication technology, issued by REC and approved by the committee constituted vide the letter issued by the Ministry of Power F.No.14/02/2021-UR&SI-II-Part(1)-(E-258136) dt. 10th January 2022, at the time of bid submission.	Valid Empanelment certificate of the sole/ lead bidder for the proposed solution, issued by REC /committee constituted thereby

Financial Requirements		
	The Bidder shall have positive net worth for each of the last three financial years. The Net worth of the Bidder should be at least 30 %(Thirty percent) of the estimated Project cost in any of the last three Financial Years Or Bidder shall have a minimum ACI of 30 % (Thirty percent) of the estimated Project cost at the close of the preceding financial year [Net Worth means sum total of the paid up capital and free reserves (excluding reserves created out of revaluation) reduced by aggregate value of accumulated losses (including debit balance in profit and loss account for current year) and intangible assets.]. [ACI means minimum investible funds (i.e., immediately available funds for investment and callable capital) subject to the limits of investment in a single investee entity (in the relevant jurisdiction for a Foreign Investment Fund, or the maximum permissible investment limit for an AIF) (as per the SEBI (AIF) Regulations, 2012, as may be amended from time to time), as applicable]. Please note: a. In case a Bidder and/(or) it's Parent(s)/ Affiliate(s) has issued any fresh equity capital during the current financial year, the same shall be permitted to be added to the Bidder's Net Worth subject to the statutory auditor of the Bidder certifying to this effect. b. In case a Bidder and/(or) it's parent(s)/ Affiliate(s), being a SEBI registered AIF or Foreign Investment Fund, has received any fresh capital commitment available for the immediate deployment during the current financial year, the same shall be permitted to be added to the Bidder's ACI subject to the statutory auditor of the Bidder certifying to this effect.	Audited Annual financial statements, Balance Sheet and P&L Account for the respective Financial Years as per the format prescribed in **Annexure-III**

The Sole/ Lead Bidder would have to clearly include and mention the details of all the solution / component providers given below. However, such solution / component providers may or may not necessarily be included as a part of the Bidding Consortium. For avoidance of doubt, it is clarified that the sole bidder/ any member of the bidding consortium can also be a solution/ component provider, provided that they meet the relevant qualification requirements as mentioned below. The Sole / lead bidder has to mandatorily mention at least one vendor for each of the solution/ component providers given below in Annexure-IV:

a) Smart Meter Manufacturer(s)
b) Head End System (HES) solution provider.
c) Meter Data Management System (MDMS) solution provider
d) System Integrator
e) RF Communication Provider (if applicable)

3.2 Minimum Qualification Requirements for Smart Meters Suppliers

S. No.	Requirements	Supporting Documents
A. Meter Manufacturer – Technical Requirement		
A1.	**Option 1:** Should have manufactured and supplied minimum [1,00,000] nos. of Smart meters (cumulative) on proposed communication technology in Indian/Global Power Distribution Utility in the last 7 (seven) years. **Option 2**: Should have manufactured and supplied minimum [20,00,000] nos. of static electricity meters (cumulative) in Indian/Global Power Distribution Utility in the last 7 (seven) years. **Option 3:** Any meter manufacturer who doesn't satisfy Option 1 & 2 but satisfies conditions (A2), (A3) & (A4) below, can also be eligible to participate in the bid as a meter manufacturer. However, meters procured for this tender from this particular meter manufacturer/ supplier, shall be limited to [25%] of the total meters proposed to be implemented as part of this tender.	a) References along with requisite contract/ Purchase Order (PO)/ Work Order (WO). The references should indicate client name, scope of work, Project start date (as per the format prescribed in Annexure-II); In case Non-Disclosure agreement (NDA) is signed with the client, Bidder shall provide an undertaking for the NDA and shall also provide a client certification as proof of experience e along with Client Name/ Email Address/ Contact no./ designation etc. b) Documentary evidence of completion of the Project or other documentary evidence indicating completion of supply (e.g. proof of payment received/ proof of asset capitalized in books of accounts (as applicable) and client certificate for supply of material or similar proofs) along with contact details of the client; c) Any other documentation for implementation performance/ operation

A2.	Smart meters shall have all the valid test certificate (issued within the last 5 years) and BIS certificate, compliant to IS 16444 Part-1* Note: *At the time of supply of LT-CT operated Meters, the smart meters shall have all the valid test certificate and BIS Certificate, compliant to IS 16444 Part-2	Valid BIS and type-test certificate to be submitted.
A3.	Should have in-house NABL or ISO/ IEC - 17025 accredited Laboratory	A valid registration certificate mentioning issue/renewal/expiry date.
A4.	Should have a valid ISO 9001:2015 certification	Copy of valid certificate

3.3 **Minimum Qualification Requirements for Head End System (HES) solution provider**

S. No.	Requirements	Supporting Documents
B. Head End System (HES) solution provider – Technical Requirements		
B1.	The HES solution should have been successfully integrated with at least 2 (two) different MDMS / other utility IT Solution in Indian/ Global Utility(ies) (power/ water/ natural gas/ telecom) in last 7 (seven) years.	Certificate / report issued by Client / MDMS OEM / MDMS solution provider. In case the HES solution provider, has integrated with their own MDMS, then a self-certification shall be provided.

3.4 **Minimum Qualification Requirements for Meter Data Management System (MDMS) solution provider**

C. Meter Data Management System (MDMS) solution provider – Technical Requirements		
C1.	The proposed MDM solution should have been successfully integrated with at least 2 (two) nos. of different HES solutions in Indian/ Global Utility(ies) (power/ water/ natural gas/ telecom) in last 7 (seven) years.	a) References along with requisite contract/ Purchase Order (PO)/ Work Order (WO). The references should indicate client name, scope of work, Project start date (as per the format prescribed in Annexure-II); *In case Non-Disclosure agreement (NDA) is signed with the client, Bidder shall provide an undertaking for the NDA and shall also provide a client certification as proof of experience along with Client Name/ Email Address/ Contact no./ designation etc.* b) Documentary evidence of completion of the Project or completion of Go-live status (i.e., Go-live certificate, UAT testing certificate etc.) of the respective project as
C2.	The proposed MDM solution should have been successfully integrated with at least 2 (two) nos. of different Billing Systems in Indian/ Global Utility(ies) (power/ water/ natural gas/ telecom) or with Billing/ Other IT systems of 2 (two) different Indian/ Global Utility(ies) in last 7 (seven) years.	

		per the definition of Go Live/ UAT specified therein or other documentary evidence indicating completion (e.g., proof of payment received/ proof of asset capitalized in books of accounts (as applicable) and client certificate for supply of material or similar proofs) along with contact details of the client. c) Certificate / report issued by Client / HES OEM/ solution provider. In case the MDMS solution provider, has integrated with their own HES, then a self-certification shall be provided. d) Any other documentation for implementation performance/ operation.
C3	Should have CMMi (Capability Maturity Model Integration) Level 3 or IEC/ISO 27001 Certification (Software Development & Customization), as the requirement may be	Copy of valid certificate

3.5 **Minimum Qualification Requirements for System Integrator**

D. System Integrator – Technical Requirements		
D1.	Should have experience of integration of HES/MDMS etc. with at least 2 (two) billing / other utility IT systems in Indian/ Global Utility(ies) (power/ water/ natural gas/ telecom) in last 7 (seven) years, in which the meters are in operation for at least 1(one) year	Certificate / report issued by Client / Billing system solution provider.
D2.	• Should have valid ISO 9001:2015 certification • Should have IEC/ ISO 27001 certification or CMMi Level 3 (or above) certifications	Copy of valid certificate

3.6 **Minimum Qualification Requirements for RF Technology Solution Provider**

E. RF Technology Solution Provider – Technical Requirements (If applicable)		
E1.	The RF technology/solution provider should have implemented project/(s) with at least [50,000] (cumulatively) modules / endpoints involving Radio Frequency (RF) mesh in an Indian/ Global Utility (power/ water/ natural gas/ telecom) in the last 7 (seven) years.	**a)** References along with requisite contract/ Purchase Order (PO)/ Work Order (WO). The references should indicate client name, scope of work, Project start date (as per the format prescribed in Annexure-II); *In case Non-Disclosure agreement (NDA) is signed with the client, Bidder shall provide an undertaking for the NDA and*

		shall also provide a client certification as proof of experience along with Client Name/ Email Address/ Contact no./ designation etc. b) Documentary evidence of completion of the Project or completion of Go-live status (i.e., Go-live certificate, UAT testing certificate etc.) of the respective project as per the definition of Go-Live/ UAT specified therein or other documentary evidence indicating completion (e.g., proof of payment received/ proof of asset capitalized in books of accounts (as applicable) and client certificate for supply of material or similar proofs) along with contact details of the client; c) Any other documentation for implementation performance/ operation.
E2.	The RF Technology/ Solution provider should have been in the communications network installation / maintenance services business for the last 1 (one) year in India. OR The RF Technology/ Solution provider should have been in the communications network installation / maintenance services business for the last 3 (three) years outside of India.	a) Certificate of Incorporation and Registration certificate along with Memorandum & Articles of Association/ Partnership deed. b) Copy of valid Licenses (In case of RF, Valid certificate issued by Wireless Planning & Coordination (WPC) Wing of the Ministry of Communications, GOI) as on date of bid submission.
E3.	The RF Technology/ Solution provider should have successfully integrated their NIC/ Communication module with at least 3 (three) different makes of smart meters in India or outside of India.	Signed agreements/ MoUs for integration of NIC module or Certificate of successful integration.

All other terms and conditions as per the SBD Version 4 published by REC vide REC/RDSS/2021-22/236 dated:20.08.2022.

4. Instructions to Participants

Sr. No	Clause	Clause Description
1	**Availability of Tender Documents**	The EOI documents can be obtained through e-procurement portal https://kppp.karnataka.gov.in on or after 01/09/2023 15:00Hours Onwards
2	**Mandatory documents required along with the submission of EOI Documents INVITED THROUGH KPP PORTAL:**	Bids shall be submitted in single envelope mode: **FIRST PART: "EMD"** of Rs. 5,000/- (Rupees Five Thousand only) General Information required as per Format furnished in **Annexure-I** **SECOND PART: "TECHNICAL BID"** shall contain the following documents: a) Documentary evidence in support of qualifying criteria b) Solution Providers c) Products Make & Model d) Approach & Methodology e) Details of Lifecycle meter cost, PMA charges, Contract period as per Format furnished in **Annexure-V** **Requisite Documents for compliance to Qualification Criteria without masking the rates and other details.**
3	**Last date for bid submission**	The technical bid shall be uploaded by 16/09/2023 within 15:00Hours in website https://kppp.karnataka.gov.in
4	**Contact Information:**	**Communication Details:** Tender Inviting Authority: General Manager (DAS) 1. #509, 5th floor Block-2 Corporate office, BESCOM, K.R Circle, Bangalore-560001 2. BESCOM Integrated Control Center-1, 17th cross, 24th Main, Sector-2, HSR layout, Bangalore-560102. E-mail ID: gmdas@bescom.co.in Mobile No.:9448279010 & Deputy General manager SG & TIC E-mail ID: dgmtic@bescom.co.in Mobile No.:8277889653

Sr. No	Clause	Clause Description
5	**Earnest Money Deposit**	Bidders shall submit, Earnest Money of Rs. 5,000/- (Rs. Five Thousand only. The EMD shall be returned without interest after opening the bid
6	General Conditions of the contract	1. BESCOM reserves the right to assess the capability and capacity of the company/firm independently in additionto the details/information furnished by the applicant. 2. Incomplete applications and applications not accompanied with supporting documents are liable to be rejected 3. BESCOM reserves the right to ask for additional information/supporting documents as and when required. 4. **This is an invitation for expression of interest and not an invitation for bid. It is explicitly restricted to obtaining information such as Lifecycle meter cost, PMA charges, Contract period, implementation period and this should not be construed as a financial proposal, it is purely for discovery of rates and no award will be issued**. 5. BESCOM reserves the right to modify, expand, restrict, scrap, re-float the Expression of Interest and/or float a tender without assigning any reason for the same. 6. All cost & expenses associated with submission of EOI shall be borne by the applicant while submitting the application and BESCOM shall have no liability, in any manner in this regard.
7	Evaluation of EOI	**This is an invitation for expression of interest and not an invitation for bid. It is explicitly restricted to obtaining information such as Lifecycle meter cost, PMA charges, Contract period, implementation period and this should not be construed as a financial proposal, it is purely for discovery of rates and no award will be issued**

ANNEXURE-I (General Information)

Bidders are requested to upload the general information as asked below along with qualification requirement documents as specified in the qualifying requirements:

Sr. No	Particulars	Details
1	Name of Bidder	
2	Registered Address	
3	Name of Contact Person with designation	
4	Contact & Fax Number	
5	Email Address	
6	Year of establishment	
7	Annual turnover last 3 years (please submitas annexure)	
8	PAN and Sales Tax No.	

ANNEXURE-II (Record of Similar work done)

S. No.	Name of Technically Evaluated Entity (ies)	Relationship with the Bidder	Date of PO/ WO	Contract Period	No. of Consumer, Nodes, etc.	Description of Work	PO/ WO Value (In INR)	Confirm attachment of PO/ WO	Confirm attachment of Installation Milestone/ execution certificate
1									
2									
3									
4									
5									

ANNEXURE-III (Format of Summary of Audited Financial Statements)

< This form needs to be submitted by Sole Bidder/ Lead Consortium Member. In case of an AIF or Foreign Investment Fund using ACI, ACI would be considered as per the certificate issued by statutory auditor (or such other certificate as filed with the regulator in the relevant jurisdiction) not older than 1 (one) month prior to the date of Bid Submission>

[Reference No.]

From:
[Address of the Lead Consortium Member/ Sole Bidder] [Telephone No., Fax No., Email]
[Date]

To:
[Utility]
[Address]

Sub: Audited Financial Statement for ..... *[Insert name of Sole Bidder/Consortium Member].*

Ref: [Tender Details]

Dear Sir/ Madam,

This is to certify that ..... *[Insert name of Sole Bidder/ Consortium Member]* having its Registered Office at ..... *[Insert Registered Address of the Consortium Member]* are in the business of ..... *[Insert briefly the nature of the business]*, have recorded the following:

NETWORTH FOR LAST THREE FINANCIALYEARS				
S. No.	Name of Financially Evaluated Entity(ies)	Relationship with Bidder	Financial Year (FY)	Net worth Amount (In Indian Rupees)
1				
2				
3				

Or

ACI FOR PRECEDING FINANCIALYEAR				
S. No.	Name of Financially Evaluated Entity(ies)	Relationship with Bidder	Financial Year (FY)	ACI Amount (In Indian Rupees)
1				
2				
3				

The above Net worth/ ACI are arrived from our Audit Reports for the last three/ preceding[2] financialyears duly submitted to the Income Tax Department along with our Audit Reports.
Hence, we certify from the records submitted to us. Thanking you,

Sincerely yours,

Yours Sincerely,
[*Insert Signature here]*
[Insert Name here]
[Insert Designation here]

Date: [Date]
Place: [Place]

ANNEXURE-IV (List of Consortium Members/ Sub-Contractor(s)

[The Bidder shall identify below the Consortium Members/ Sub-contractor(s) for major Projectitems. For sub-contractor a Letter of Intent must be provided.]

Major Project Item	Proposed Consortium Member / Sub-Contractor(s)	Nationality
Meter Manufacturer		
Communication Provider		
Head End System (HES) Solution Provider		
Cloud Service Provider / Managed Service Provider		
RF Solution Provider (if any)		
[Other] (if any)		

ANNEXURE-V

Details Lifecycle meter cost, PMA charges, Contract period

Sl. No.	Item Particular	Base Rate/meter in Rs.	Awarded Rate/meter in Rs.
1	**Smart Energy Meters**		
a	Single Phase whole current smart meter with Meter Box and Back-end IT Infra with associated works and requisite no. of polycarbonate seal- **consumer meter**		
b	Three Phase whole current smart meter with Meter Box and Back-end IT Infra with associated works and requisite no. of polycarbonate seal- **consumer meter**		
c	CT operated 3-phase smart meter with CT with Meter Box and Back-end IT Infra with associated works and requisite no. of polycarbonate seal- **consumer meter**		
d	Three-phase CT/PT operated smart meter Feeder Meter with CTs, control cables, with DI provisions Meter Box and Back-end IT Infra with associated works and requisite no. of polycarbonate seal- **consumer meter**		
e	Three phase LT-CT operated Smart Meter (with Net-Metering) – **DT Meter** with CTs, control cables, with DI provisions Meter Box and Back-end IT Infra with associated works and requisite no. of polycarbonate seal		
f	Three phase LT-CT operated Smart Meter – **Boundary Meter** with CTs, control cables, with DI provisions Meter Box and Back-end IT Infra with associated works and requisite no. of polycarbonate seal		
g	Three-phase CT/PT operated smart meter **Feeder Meter** with CTs, control cables, with DI provisions Meter Box and Back-end IT Infra with associated works and requisite no. of polycarbonate seal		
h	PMA charges		
Sl No	**Particulars**	**Duration in months**	
1	Contract Period		
2	Implementation Period		

Note: The above details shall be furnished as per the awarded contract/PO/WO/DWA/LOA copies.